

IN THE CLAIMS:

Please amend claims 1 and 8 as follows:

1. (Currently Amended) A head positioning control method for a storage disk device which comprises:

multiple storage disks each having two recording faces, each recording face storing servo signals;

a plurality of heads that read information from each of said storage disks, one of the heads being a standard head, each head reading information from a different recording face of one of said storage disks;

an actuator that moves said heads; and

a control circuit that positions said heads based on the servo signals read from said recording faces of said storage disks by using a selected head one of said plurality of heads, said method comprising:

a step of receiving a head switching cue to switch from a current head to a switched head;

a step of synchronizing a time of a servo gate signal, of said switched head, for detecting said servo signal with a time of said servo signal, read by said switched head; and

a step of reading said servo signal from ~~an output signal of~~ said switched head in response to said synchronized servo gate signal, and positioning said switched head according to said read servo signal,

wherein said synchronizing step comprises:

a step of determining a time for reading said servo signal of said switched head, in response to said head switching cue; and

a step of synchronizing the time of said servo gate signal with said determined time,

and wherein said determining step comprises:

a step of reading a first discrepancy time between said standard head and said current head, and reading a second discrepancy time between said standard head and said switched head; and

a step of calculating the time difference between said first and second discrepancy times to determine said time.

2. (Cancelled)

3. (Previously Presented) The head positioning control method for a storage disk device of Claim 1, wherein said time determining step comprises a step for determining said time of a value greater than one sample period for said positioning control.

4. (Cancelled)

5. (Previously Presented) The head positioning control method for a storage disk device of Claim 1, wherein said synchronizing step comprises a step for time-shifting said servo gate signal for said time difference.

6. (Previously Presented) The head positioning control method for a storage disk device of Claim 5, wherein said time determining step comprises:

a step of determining the detection time of said servo signal for said current head;

a step of determining the detection time of said servo signal for said switched head; and

a step of determining the time difference between the two detection times.

7. (Previously Presented) The head positioning control method for a storage disk device of Claim 1, wherein said positioning step comprises:

a step of calculating, in response to said head switching cue, the time difference between the detection time for said current head and the detection time for said switched head;

a step of determining whether or not the said time difference is shorter than one sample interval; and

a step of inhibiting positioning in response to said servo gate signal when said time difference is shorter than one sample interval.

8. (Currently Amended) A head positioning control device for a storage disk apparatus, comprising:

multiple storage disks each having two recording faces, each recording face storing servo signals;

a plurality of heads that read information from each of said storage disks, one of said heads being a standard head, each head reading information from a different recording face of one of said storage disks;

an actuator that moves said heads; and

a control circuit that positions said heads based on the servo signal read from said recording face of said storage disk using a selected head,

wherein said control circuit comprises:

a synchronization circuit that, in response to a head switching cue to switch from a current head to a switched head, synchronizes the time of a servo gate signal, of said switched head, for detecting said servo signal with the time of the servo signal read by said switched head, and

a processing circuit that, in response to said synchronized detection signal, reads the servo signal of said switched head and, in response to the read servo signal, positions the heads,

wherein said synchronization circuit comprises:

a memory for storing a discrepancy time between said standard head and each said head; and

a circuit for determining a time for reading said servo signal from said switched head, in response to said head switching cue, and synchronizing the time of said servo gate signal with said determined time,

and wherein said circuit reads a first discrepancy time between said standard head and said current head and a second discrepancy time between said standard head and said ~~selected~~ switched head; and calculates the time difference between said first and second discrepancy times to determine said time.

9. (Cancelled)

10. (Previously Presented) The head positioning control device for a storage disk apparatus of Claim 8, wherein said synchronization circuit comprises a circuit that determines said time the value of which is greater than one sample period for said positioning control.

11. (Cancelled)

12. (Previously Presented) The head positioning control device for a storage disk apparatus of Claim 8, wherein said synchronization circuit comprises:

a circuit that shifts in time said servo gate signal by that time difference.

13. (Previous Presented) The head positioning control device for a storage disk apparatus of Claim 8, wherein said synchronization circuit comprises a circuit for determining from said memory the detection time of said servo signal for said current head and the detection time of the said servo signal for said switched head, and calculating the time difference between the two detection times.

14. (Previous Presented) The head positioning control device for a storage disk apparatus of Claim 8, wherein said processing circuit comprises a circuit that determines whether or not the time difference between the detection time for said current head and the detection time for said switched head is less than one sample interval and that, when said time difference is shorter than one sample interval, inhibits positioning in response to said servo gate signal.